HONDA ServiceNews June 2003

Grade Logic Control Explained

NOTE: This article applies to A/T-equipped '94–03 Accords, '96–03 Civics, '97–03 CR-Vs, '03 Elements, '95–03 Odysseys, '03 Pilots, and '97–01 Preludes.

Grade Logic Control in the PCM keeps the A/T from making frequent shifts when you're going up or down a hill, or going around corners. The vehicle can ride more smoothly and have more power when it's needed. The PCM adjusts the shift points by comparing actual driving conditions—based on input from the vehicle speed sensor, throttle position sensor, and engine coolant temperature sensor, along with the brake switch signal and the shift lever position signal—to the values stored in the PCM memory.

Ascending Control. When the PCM determines that you're climbing a hill with the shift lever in a **D** (drive) position (shift lever position names vary by model and model year), Grade Logic Control may delay upshifting from 2nd to 3rd gear, 3rd to 4th gear, and from 4th to 5th gear (if you've got a 5-speed A/T), to keep the A/T from shifting too soon or too often.

Descending Control. When the PCM determines that you're going down a hill with the shift lever in a **D** (drive) position (shift lever position names vary by model and model year), Grade Logic Control may delay upshifting from 2nd to 3rd gear, 3rd to 4th gear, and from 4th to 5th gear (if you've got a 5-speed A/T), to keep the A/T from shifting too soon or too often. This shift pattern and deceleration lockup help control your speed so you don't need to brake. If you do need to brake, Grade Logic Control may downshift the A/T from 5th to 4th gear (if you've got a 5-speed A/T), 4th to 3rd gear, or 3rd to 2nd gear, depending on how steep the hill is, how fast you're going, and how fast you're decelerating.

Deceleration Control. When going around corners, the vehicle needs to decelerate first and then accelerate. Grade Logic Control anticipates corners when you're decelerating from speeds above 27 mph and reduces the number of gear shifts.

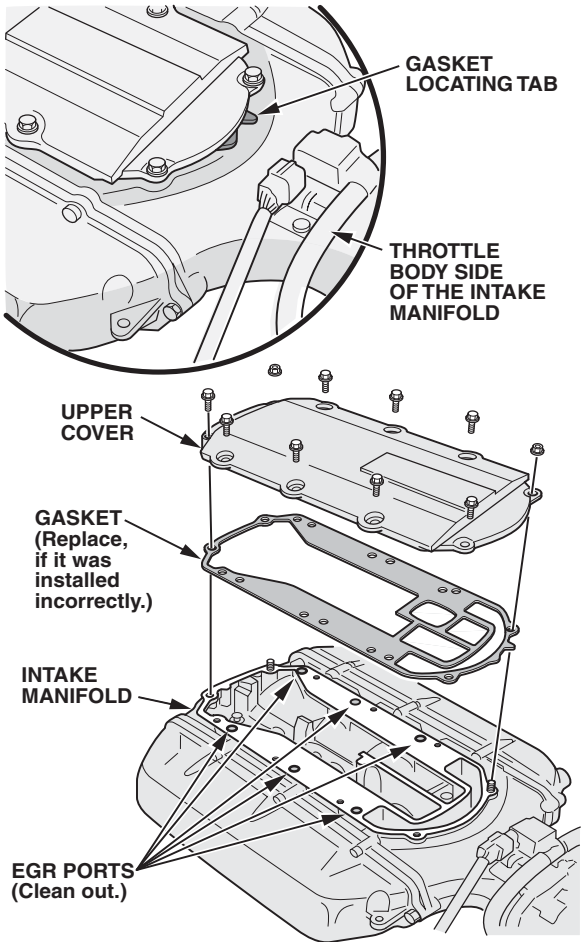
Want more info about Grade Logic Control? Refer to section 14 of the appropriate S/M.

Misfire DTCs, Engine Runs Rough From 40 to 70 mph

When owners of '02–03 Odysseys and '03 Pilots complain about the engine running rough between 40 and 70 mph, are you finding misfire DTCs (P0301 thru P0306, P1399) set? The problem could be clogged EGR ports or that the intake manifold gasket is installed upside down. Since the EGR ports aren't symmetrical, an upside-down gasket covers some of the ports, creating uneven EGR distribution.

To check if the intake manifold gasket is correctly installed, remove the plastic intake manifold cover. If you see a locating tab on the gasket at the throttle body end of the intake manifold, toward the rear cylinder head, the gasket is installed OK. If you don't see this tab, the gasket is installed upside down and must be replaced.

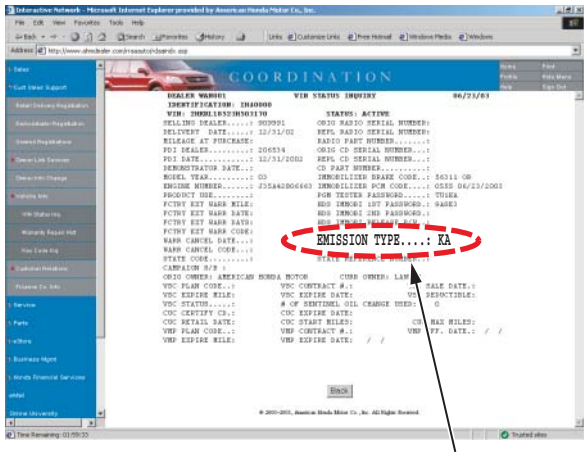
Remove the upper cover and the intake manifold gasket, and clean out the EGR ports. Reinstall the gasket, (use a new one if it was installed upside down), making sure the locating tab on the gasket faces toward the rear cylinder head. Reinstall the upper cover, and torque the bolts and nuts to spec. Then reinstall the intake manifold cover.


GASKET LOCATING TAB
THROTTLE BODY SIDE OF THE INTAKE MANIFOLD
UPPER COVER
GASKET (Replace, if it was installed incorrectly.)
INTAKE MANIFOLD
EGR PORTS (Clean out.)

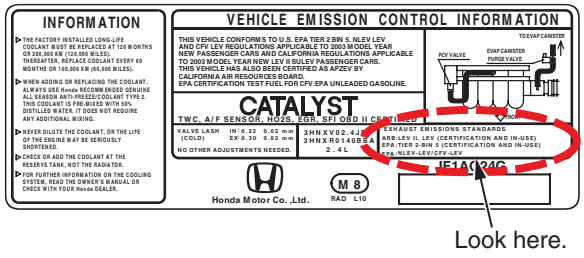
What's This Vehicle's Emission Type?

NOTE: This article applies to '98–03 Accords, '96–03 Civics, '97–03 CR-Vs, '03 Elements, '00–03 Insights, '99–03 Odysseys, '03 Pilots, '94–01 Preludes, and '00–03 S2000s.

Need to know a vehicle's emission type so you can order EVAP system components, a catalytic converter, or an ECM/PCM? Look no further than the Interactive Network (*i*N). From the main menu, click on **Cust Sales Support**, **Vehicle Info**, and then **VIN Status Inq.** From the **VIN Status Inquiry** screen, enter the VIN, and click **Submit**. You'll see the emission type (KA or KL) listed right below the immobilizer info.



And if you need to know the vehicle's emission group (LEV, ULEV, etc.), just pop the hood, and look at the Under-Hood Emission Control Label.



Understanding the California Emissions Warranty

There's seems to be confusion among some Honda dealers in California, Massachusetts, and Vermont regarding the intent of the California Emissions Warranty.

Word-for-word, the Warranty Information Booklet states:

"In addition to the Federal Emissions Warranties, the California Emissions Warranties that follow cover all vehicles registered and normally driven in California, Massachusetts, and Vermont."

In plain English, this means vehicles registered and operated in those states are covered by the California Emissions Warranty, the Federal Emissions Warranty, and the standard vehicle manufacturer's warranties.

For more info, refer to the Warranty Information Booklet.

Instrument Panel Brightness Setting Doesn't Stay Set

On '03 Civic 4-doors, if the instrument panel brightness setting changes every time you turn the ignition switch to LOCK (0), you've got a bad gauge assembly and need to replace it. A countermeasure for this problem was applied to both production and parts stock gauge assemblies on February 3, 2003. To make sure you're installing one of these countermeasured gauge assemblies, check the date code on the back of the assembly. A countermeasured assembly has a date code *later* than February 3, 2003.

Replacement Roof Rack Inserts Available

Honda parts stock now has replacement rubber inserts for the accessory roof rack crossbars on '02–03 CR-Vs, '03 Elements, '99–03 Odysseys, and '03 Pilots. Order P/N 08L02-S0X-101R2, H/C 7085335.

Transferring Odo Reading to New Gauge Assembly

If you're replacing the gauge assembly in a '03 Accord, you can now transfer the odometer reading from the original gauge assembly to the new one using the Honda Diagnostic System (HDS). Here's how:

1. With the original gauge assembly still in the vehicle, connect the HDS to the 16P data link connector (DLC).

2. Turn the ignition switch to ON (II), and turn on the HDS.

3. At the screen prompts, enter the VIN and the odometer reading.

4. From the **System Selection Menu** screen, select **Body Electrical.** Select **Gauges**, **Adjustment**, and then **Odo Rewrite**. Follow the screen prompts to upload the odometer data to the HDS.

5. Replace the gauge assembly, then download the odometer data from the HDS to the new gauge assembly.

As soon as the odometer rewrite procedure begins, the HDS uploads the current odometer reading and the odometer on the gauge assembly displays **---**. When this happens, the odometer is disabled, and you can't restore the original odometer reading to it. You must download the odometer reading from the HDS to the new gauge assembly.

Don't Hang the HDS on the Steering Wheel

Although it's convenient, don't hang the Honda Diagnostic System (HDS) on the steering wheel by the folding rear stand. The stand has a nasty, sharp edge on it that could cut or damage the steering wheel material, especially leather.

Windshield Washer Nozzles Leak or Dribble on Hood

Getting complaints from '03 Pilot owners of leaking or dribbling windshield washer nozzles? There's a simple way to fix this problem: Install an in-line check valve to restrict the flow. Order P/N 76826-SH0-A02, H/C 2958957.

RES Display Doesn't Work; RES Audio OK: '03 Odyssey

If the RES display screen in a '03 Odyssey EX doesn't work, but the audio portion comes through loud and clear, remove the front passenger's kick panel, and check for a loose connector C586. If the connector is loose, unplug it, make sure there are no bent or broken pins, then plug it back in.

Moonroof Visor Installation: '03 Accord

The accessory moonroof visor for the '03 Accord is a lot different from previous Accord moonroof visors. If you're thinking that you can just assemble it beforehand and then pop it into the roof, you're wrong. You'll crack the visor when you push down on it to set the brackets. To avoid damaging the visor, you must mount the front and side brackets to the visor while the visor is on the roof. If you follow the steps in the installation instructions to the letter, you can't go wrong.

Rust Stains on Exhaust Pipe Finisher: '03 Accord V6 2-Dr

Are owners of '03 Accord V6 2-doors complaining of rust stains on the inside of their bright, shiny exhaust pipe finishers? Don't replace the finishers; they're made of stainless steel, and there's nothing wrong with them. What looks like rust are actually stains. These stains are caused by condensation in the combustion process, which discolors the stainless steel exhaust system.

As unsightly as these stains are, they're easy to get rid of. Just buff them with some #0000 to 00 grade steel wool for about 20 seconds each, and the stains are gone.

No Sound From Front Door Speakers: '03 Pilot

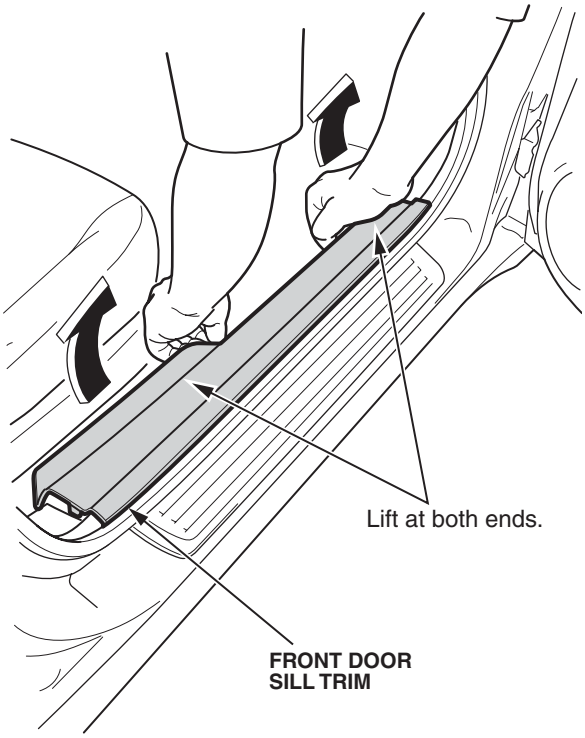
If owners of '03 Pilots are complaining of no sound from one or both of the front door speakers, the problem could be bent speaker terminals. Bent terminals can rub on the front door inner panel, wear through the paint, and short out the speaker wires to ground.

Remove the door panel, and look at the speaker terminals. If a terminal is touching the door, bend the terminal bracket so it has 4 mm clearance, and then reinstall the door panel.

Front Door Sill Trim Removal: ’03 Accord 4-Door

You won’t find it mentioned in the S/M, but there’s a trick to removing the front door sill trim on a ’03 Accord 4-door. If you don’t remove it properly, you could crack the trim at its front or rear clips or even crack the kick panel that the trim clips into.

To properly remove the front door sill trim, tuck your fingers under the inside bottom edge of the trim at each end, then pull the entire trim up toward you (it’s kind of a rolling action) so both the front and rear clips release at the same time. *Never try to remove the trim by lifting up on just one end.*



Operating Tips for Honda CD Player and CD Changer

Here are some handy tips to keep in mind and pass on to your customers. When using a Honda CD player or CD changer,

- Play only standard, round CDs. Odd-shaped CDs could jam the drive or cause other problems.
- To get the best results from a CD-R (recordable) disc, make sure you use a high-quality disc labeled for audio use. When burning a CD-R disc, you must close the session to play the disc in a CD player.
- Don’t try playing a CD-R disc in the Rear Entertainment System (RES); it won’t work.
- Don’t try playing a CD-RW (recordable/rewritable) disc in a Honda CD player or CD changer; it too won’t work.
- A new CD could have rough inner or outer edges. The small plastic pieces that cause this roughness can break off and fall on the recording surface of the disc. This can cause skipping or other problems. To avoid this, remove these pieces by rubbing the inner and outer edges of the disc with the side of a pencil or pen.
- Don’t play any CD-R with a stick-on label in a Honda CD player or CD changer. If the label peels up, it could jam the player or changer.

Buzz, Rattle, or Pinging on Acceleration: ’03 Pilot

Obsolete

If owner’s of ’03 Pilots are complaining of a buzz, rattle, or pinging when accelerating, the problem could be the accelerator cable bracket vibrating against the left front damper tower. If the bracket is the culprit, tighten the bracket mounting bolt to **24 N·m (18 lb-ft)**, and then bend the bracket until it’s **10 mm (0.4 in.)** away from the damper tower.

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ASN 25363-37103 (0707)

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